

**Before the
Federal Communications Commission
Washington, DC**

In the Matter of)	
)	
Nationwide Number Portability)	WC Docket No. 17-244
)	
Numbering Policies for Modern Communications)	WC Docket No. 13-97
)	

**COMMENTS
OF
NTCA–THE RURAL BROADBAND ASSOCIATION**



By: /s/ Michael R. Romano
Michael R. Romano
Senior Vice President –
Industry Affairs & Business Development
mromano@ntca.org

By: /s/ Brian J. Ford
Brian J. Ford
Director of Industry Affairs
bford@ntca.org

4121 Wilson Boulevard, Suite 1000
Arlington, VA 22203
703-351-2000

June 7, 2019

Table of Contents

I. INTRODUCTION & SUMMARY1

II. THE *NANC NNP REPORT* FAILED TO ADEQUATELY ACCOUNT FOR THE MYRIAD CATEGORIES OF COSTS THAT SPECIFIC METHODS OF ENABLING NNP WILL IMPOSE ON RURAL PROVIDERS AND THEIR CONSUMERS; ANY COMMISSION ACTION TO ENABLE NNP SHOULD BE PRECEDED BY A COST-BENEFIT ANALYSIS OVERSEEN BY THE OFFICE OF ECONOMICS AND ANALYTICS.....2

 A. A mandatory migration from existing market-based methods for offering NNP to NLRNs will impose several categories of costs on RLECs and rural consumers and risks generating significant consumer confusion.3

 B. Absent Commission attention to the proper assignment of call routing responsibilities in a NLRN-enabled NNP environment, carriers (and their subscribers) not directly involved in the porting of telephone numbers on a nationwide basis would be forced to assume the costs of enabling other carriers to do so.....7

 C. The Commission’s Office of Economics and Analytics should conduct a comprehensive review of the *NANC NNP Report* that includes the costs identified above. That review should also consider that “commercial agreements” avoid these costs, and ultimately ensure that those benefiting from NNP assume responsibility for the costs of doing so.12

III. CONCLUSION.....16

**Before the
Federal Communications Commission
Washington, DC**

In the Matter of)	
)	
Nationwide Number Portability)	WC Docket No. 17-244
)	
Numbering Policies for Modern Communications)	WC Docket No. 13-97
)	

**COMMENTS
OF
NTCA–THE RURAL BROADBAND ASSOCIATION**

I. INTRODUCTION & SUMMARY

NTCA–The Rural Broadband Association (“NTCA”)¹ hereby submits these comments in response to the Public Notice issued by the Federal Communications Commission (“Commission”) in the above-captioned proceeding.² The Public Notice seeks comment on the “Additional Findings Report on Nationwide Number Portability (NNP)” (“*NANC NNP Report*”)³ submitted to the Commission by the North American Numbering Council (“NANC”). That report analyzed methods – specifically “National Local Routing Numbers” (“NLRNs”) and “IP Local Routing Numbers” – that could, with amendments to certain Commission rules, be used by service providers to offer NNP functionality⁴ to consumers in lieu of already existing market-

¹ NTCA represents nearly 850 rural rate-of-return regulated telecommunications providers (“RLECs”). All of NTCA’s members are full service local exchange carriers and broadband providers, and many of its members provide wireless, cable, satellite, and long distance and other competitive services to their communities.

² *Wireline Competition Bureau Seeks Comment on NANC Report Regarding Proposals to Implement Nationwide Number Portability*, WC Docket No. 17-244, WC Docket No. 13-97, DA 19-436 (rel. May 17, 2019).

³ Letter and Additional Findings Report on Nationwide Number Portability from Hon. Travis Kavulla, Chair, North American Numbering Council to Kris Anne Monteith, Chief, FCC Wireline Competition Bureau, WC Docket No. 17-244, WC Docket No. 13-94 (May 13, 2019) (Report), <http://nanc-chair.org> (“*NANC NNP Report*”).

⁴ NNP is defined as “[t]he ability of users of telecommunications services to retain existing telecommunications numbers without impairment of quality, reliability; or convenience when switching from one

based methods of doing so. NTCA is a member of the NANC and, as a representative of small, rural carriers with both wireline and wireless operations, has a unique perspective on NNP and has long engaged on this subject.

Any voice provider can, if it so chooses, market and provide NNP today, simply via the use of commercial agreements between those carriers interested in doing so on the one hand and operators on the other hand that can offer the transport or other features necessary to support this functionality. The Commission therefore need not rush through new rules based on an incomplete record or working group reports that fail to identify, quantify, and address every potential cost involved in other, non-market-based NNP mandates. NTCA herein identifies those costs and urges the Commission to avoid a scenario under which those benefitting from NNP do not assume responsibility for such costs but instead push them onto other operators and rural consumers.

II. THE NANC NNP REPORT FAILED TO ADEQUATELY ACCOUNT FOR THE MYRIAD CATEGORIES OF COSTS THAT SPECIFIC METHODS OF ENABLING NNP WILL IMPOSE ON RURAL PROVIDERS AND THEIR CONSUMERS; ANY COMMISSION ACTION TO ENABLE NNP SHOULD BE PRECEDED BY A COST-BENEFIT ANALYSIS OVERSEEN BY THE OFFICE OF ECONOMICS AND ANALYTICS.

NTCA and its member companies welcome a thoughtful dialogue regarding how best to ensure the availability of NNP functionality for the benefit of consumers and carriers nationwide. NTCA's rural operator members have long recognized the value in NNP as a service capability and will continue to consider it as a response to consumer demand. But, as NTCA has stated in

telecommunications carrier to another or when moving from one physical location to another." *NANC NNP Report*, p. 4.

the past,⁵ the fact is there is no *implementation* of NNP to be done. Rather, NNP can be done *today*, so the debate here is *not* over whether to implement NNP. Rather, the question presented here is whether NNP might be implemented in a different way than it already is – and the costs, benefits, and consequences of such alternatives. Indeed, it is irrefutable that any voice provider can, if it so chooses, market and provide NNP *today* via the use of commercial agreements with operators that can provide any transport or other features necessary to support this functionality.

As discussed further below, this is the most direct and immediate – and most market-based – route to the desired outcome, as it is the least complicated, least time-consuming, and least disruptive means of allowing those that want to provide NNP capability to consumers the ability to take the steps to do so. Thus, the Commission need not rush through new rules based on an incomplete record or working group reports that fail to identify, quantify, and address every potential cost involved in other, non-market-based NNP mandates; rather, consistent generally with its view of assessing potential regulations, the Commission should ensure that it has the information necessary to perform a comprehensive cost/benefit analysis of various NNP alternatives to the market-based solution already in place.

A. A mandatory migration from existing market-based methods for offering NNP to NLRNs will impose several categories of costs on RLECs and rural consumers and risks generating significant consumer confusion.

Should the Commission adopt rules to mandate a NLRN-enabled NNP environment, RLECs and their rural customers will incur several categories of costs. While the specific steps and level of effort may vary between different rural carriers, depending on region of service,

⁵ See Comments of NTCA, WC Docket Nos. 17-244, 13-97 (fil. Dec. 27, 2017); NTCA *ex parte* letter to Chairman Kane, Betty Ann Kane, Chairman Public Service Commission of the District of Columbia, WC Docket No. 13-97, WC Docket No. 07-149, WC Docket No. 09-109, CC Docket No. 95- 116, GN Docket No. 13-5 (fil. Apr. 16, 2016).

network size and equipment deployed, the functional steps for these providers are outlined below (these costs are in addition to the transport costs discussed in detail in Section II. B. *infra*):

1. **Portable NPA-NXXs:** NPA-NXXs that are portable will need to be identified and loaded in the Class 5 switch translations. Once the NPA-NXXs are initially loaded in the class 5 switch, service providers will be required to perform frequent updates as NPA-NXXs become marked portable in the Local Exchange Routing Guide (“LERG”). This step prepares the Class 5 switch for the All Call Query (“ACQ”) function that is required for NLRN-enabled NNP. Today, ACQ is not an established feature for the majority of rural carrier class 5 switching solutions, and RLECs would be required to load hundreds or even thousands of NPA-NXXs manually.
2. **Translation Enhancements:** With NNP, any number, regardless of NPA-NXX, could be a local or toll call. This requires new translations that can determine how to handle call routing conditions where some numbers from an NPA-NXX could be local and other numbers from the same NPA-NXX could be toll.
3. **Billing Systems:** Billing vendors will have to update software to create Inter/Intralata billing records for a number based on the LRN that was once local. This will likely have a direct and indirect impact on rural companies through potential integration or software upgrade costs and may delay other features and functions billing vendors were working towards developing for the rural customer base.
4. **LNP Service Establishment:** Service Providers who have ported numbers and even many who have not nationally ported their NPA-NXXs would have to establish contracts with an LNP provider.
5. **Customer Education:** NNP will change fundamental call process rules that have been established and followed by end users and could result in significant customer confusion. Under NNP, end users may be required to redefine their understanding of when a toll or local call is being placed, potentially incurring unexpected charges. In addition, depending on how NNP is rolled out, services such as toll denial will need to be carefully reviewed.
6. **Software and Hardware Upgrades:** Depending on switch vendor and vintage, hardware and software updates may be required. These upgrades will likely be made available for equipment that is currently still vendor supported. For un-supported or older solutions, it is unlikely any upgrades will be made available.
7. **Complex Changes:** For many of the legacy systems deployed, there are fewer and fewer knowledgeable people to assist in making the advanced translations changes required.

This may make it difficult to find qualified assistance and may increase costs to make these onetime changes on legacy systems.

8. Automated Provisioning and Customer Care Solutions: Automated provisioning and customer care solutions should be reviewed with vendors in the rural space as costs may be incurred to add support for foreign NPA-NXXs to be setup in established deployments.

It must be noted that while the *NANC NNP Report* attempted to quantify the costs of enabling NNP via NLRNs (via magnitudes of costs), that attempt did not recognize that large service providers and rural carriers have different thresholds for what is considered a small, medium, large and extra-large cost. These ranges have been redefined as outlined below for rural service providers with respect to the categories of costs identified above.

Cost Magnitudes:

Small - \$0 to \$1,000

Medium - \$1,001 to \$10,000

Large - \$10,001 to \$100,000

Extra-Large - \$100,001 and up

The cost impacts listed in the below table are estimated for establishing the technical aspects of NNP, to ensure that calls to LRNs are properly routed. Certain of the costs – customer education in particular – are required to avoid customer confusion or frustration at suddenly finding that calls to a number with the same NPA-NXX that was once “toll free” now comes with long-distance charges. These cost impacts could vary depending on how rules and regulations for a potential NNP solution are defined.

NNP Preparation Category	Service Provider Consideration	Service Provider Impact
Portable NPA-NXXs	Initial Cost and Recurring Cost	Setup - Medium - Recurring Small
Translation Enhancements	Initial Cost Per Switch	Setup - Large
Billing Systems	TBD	TBD
LNP Service Establishment	Recurring Costs	Small
Customer Education	Initial Cost and Recurring Cost	Setup - Large - Recurring Medium
Software and Hardware	Cost and Capability	Large to Extra-Large
Complex Changes	Finding Qualified Assistance	Large
Automated Provisioning and Customer Care	TBD	TBD

As can be seen above, the use of NLRNs does not come without substantial cost. (It is also worth noting that none of these costs arise today in the context of market-based NNP implementation.) These NLRN implementation costs range from direct “network” costs necessary to ensure that calls to ported-out numbers are properly routed to those necessary to educate consumers as to the ramifications of this new process. Moreover, under the call flow scenario set forth above, in a NLRN-enabled NNP environment, the “porting-in” carrier is one that must be properly viewed as having realized a benefit from NNP, capturing a new subscriber via its ability to market and provide NNP as a service. The “porting out” carrier is one that has “lost” that subscriber. Yet the costs of ensuring that this can take place and that calls are not misrouted will fall upon carriers (and ultimately their end-users) not involved in the transaction. At bottom, NLRN is not a means of implementing something not already in place – rather, it is a means of transferring the costs (those identified above as well as the transport costs discussed in the next section) of that implementation to providers and consumers other than those benefitting from NNP.

B. Absent Commission attention to the proper assignment of call routing responsibilities in a NLRN-enabled NNP environment, carriers (and their subscribers) not directly involved in the porting of telephone numbers on a nationwide basis would be forced to assume the costs of enabling other carriers to do so.

As part of its analysis of the costs and ramifications of Commission mandates to enable further NNP functionality (specifically via the use of NLRNs), NTCA has set forth below a “call flow scenario” intended to provide a picture of how NNP could directly impact rural consumers. This call flow scenario is but one possible scenario and is based on the assumption that the Commission amends its rules to mandate use of the NLRN approach discussed in the *NANC NNP Report*.

For purposes of this call flow scenario assume:

- Wireless Carrier 1 is a regional wireless carrier based in Dallas, TX (Dallas MTA).
- Wireless Carrier 2 is a regional wireless carrier based in Minneapolis, MN (Minneapolis MTA).
- ABC RLEC is a wireline carrier based in rural TX (Dallas MTA).
- Wireless Carrier 2 and ABC RLEC do NOT have direct interconnections in place.
- Wireless Carrier 2 does NOT have any operations/physical network presence in the Dallas MTA.

Presume now that a customer of Wireless Carrier 1 in Dallas moves to Minneapolis and requests to have his or her “Dallas” telephone number ported from Wireless Carrier 1 that provides regional service in Dallas to Wireless Carrier 2 that provides regional service in Minneapolis. A customer of ABC RLEC in rural Texas (but within the Dallas MTA) then calls that wireless customer who continues to have a Dallas telephone number but is ***physically located in Minneapolis***.

In the scenario described above, any “ABC RLEC” subscribers placing a call to a consumer that was once a neighbor or at the very least located in the same basic geographic area may now incur unanticipated long-distance charges where none were applicable before – the call now, instead of being destined for Dallas, must be carried all the way to Minnesota. To its credit, the *NANC NNP Report*⁶ does acknowledge that such charges may be unanticipated by the subscriber. Unfortunately, at no point does the report consider whether these subscribers should be forced to incur these charges at all or acknowledge how any additional charges or costs incurred by rural carriers and consumers may negatively impact universal service. Indeed, the *NANC NNP Report* acknowledges only “rating” issues, that is, that the end-user ABC RLEC subscriber will incur long-distance charges as calls once local are now “rated” as long-distance.

The costs in this scenario are not limited to consumer confusion and potential toll charges. To the contrary, ABC RLEC – an entity that has neither captured new subscribers or nor lost subscribers – may suffer substantial costs in the form of transport costs necessary to route calls from ABC RLEC’s serving area to Minneapolis. Simply put, the costs of implementing NNP in this instance are not borne by those benefitting most directly from offering such a service to potential customers, and the costs are not borne merely by those losing customers. The *NANC NNP Report*’s failure to acknowledge that these other costs even exist for parties that are *not* serving the porting customer, never mind that such costs will be borne by hundreds of rural carriers and the hundreds of thousands of rural consumers they serve, represents a fatal flaw in logic and a patent misunderstanding of how calls flow and the costs of connecting them; the Commission must rectify this lack of a holistic and thorough cost-benefit

⁶ *NANC NNP Report*, p. 10.

analysis. Indeed, those costs – along with potential disruptions to existing routing practices and the prospect to consumer confusion related to the sudden assessment of long-distance charges for calling a “local number” – should be factors the Commission uses in evaluating whether market-based solutions for NNP are a better means of apportioning the costs and benefits than government mandates for a particular technological solution such as NLRN. Thus, these factors must be taken into account beyond the overly narrow analysis contained within the *NANC NNP Report*.

Of course, the simplest and most direct route (as discussed below) to providers offering NNP as a service as well as to avoiding this shifting of costs is for the Commission to encourage providers’ use of commercial agreements. This market-based solution is in fact available to any and all providers *today* (meaning the Commission need not take any action) – but the providers wanting to provide NNP functionality to their consumers must then be willing to assume the costs of doing so. The Commission should not be misled into imposing by regulatory fiat a particular NNP technology by those seeking to transfer the costs of such functionality to others in the marketplace.

To be clear, NTCA supports Commission action taken to promote NNP functionality if done thoughtfully, with an eye towards avoiding unnecessary disruptions and consumer confusion or foisting upon small rural operators responsibilities for routing of voice traffic to distant points of interconnection as the consequence of other providers offering such a service. With respect to the latter issue of transport costs, as to NNP specifically, but also to other questions presented before the Commission with respect to how networks exchange data and

calls,⁷ there is a clear need for a rule establishing and limiting RLEC transport obligations should the Commission move forward with NLRN or anything other than the continued use of commercial agreements. Specifically, if NNP is mandated through any means other than a market-based mechanism under existing commercial agreements, a “rural transport rule” that limits RLEC responsibility for the transport of calls becomes critical to ensure that these carriers will not be compelled to carry traffic or establish meet-points beyond their study areas *as the price of allowing other carriers to implement this service*. As discussed below, the Commission has previously adopted such a rule when similar concerns arose, and such a rule represents the simplest (and perhaps the only) way to proceed forward with anything other than use of existing commercial agreement structures and market-based mechanisms.⁸

More specifically, in connection with a movement toward bill and keep intercarrier compensation structures in 2011, the Commission adopted a “rural transport rule” that limited the transport and provisioning obligations of RLECs to its meet point when a non-rural terminating carrier’s point of presence is located outside of the rural RLEC’s service area. As

⁷ NTCA *ex parte* letter, CG Docket No. 17-59, WC Docket No. 17-97 (fil. May 23, 2019), p. 6 (“[T]he very nature of SHAKEN/STIR as an ‘end-to-end’ IP solution is relevant; a call must be handed off from originating to terminating provider and to any intermediate carriers in the call-path in IP format for certificates to transfer. Yet, as of today, there are no rules to govern the exchange of such traffic. Absent some clear “rules of the road,” rural operators in need of IP interconnection agreements to implement SHAKEN/STIR could find themselves at the mercy of larger providers that could shift to these small carriers and their rural customers the costs of transporting voice calls between rural operators’ local network edges and distant points of interconnection. As this would be required for all voice calls, these costs could escalate to the point of undermining universal service and the affordability of voice service rates in rural America. Defining clear rules of the road that allow for rural operators to maintain network edges and points of interconnection within the rural areas they serve (as has been the case in all prior forms of interconnection) is therefore critical to promotion and successful implementation of the SHAKEN/STIR framework by smaller rural carriers.”).

⁸ Of course, such a rule would only account for one category of costs with respect to NNP – transport – and additional costs identified herein would need to be examined and addressed as well should a new means of offering NNP capability be implemented.

NTCA stated at the time⁹ (and as the Commission concurred),¹⁰ such a rule was necessary to prevent RLECs from incurring substantial transport costs that would be unrecoverable from small rural customer bases in defiance of universal service objectives.

Here, a similar view of broader concerns is critical. Over time, numerous consumers moving from small and medium sized cities and towns are increasingly likely to seek to take their telephone number with them. While a positive for those consumers, should the Commission adopt rules to mandate implementation of NLRNs without taking care to properly apportion transport responsibilities, the costs of transport for all of the calls associated with all of those consumers doing so could be shifted to RLECs. These small operators would then be forced to recover those likely significant costs from their small customer base, threatening to undermine the affordability of services that is at the heart of Section 254 of the Communications Act of 1934, as amended.¹¹ This could take place at the same time as other broader shifts are underway – via the already ongoing IP transition as well as increasing consumer demand for bandwidth – and the Commission can and should take steps (via a “network edge” rule) to limit these small operators’ responsibilities for footing the bill for other providers to market and offer NNP as a service.

⁹ Letter from Michael Romano, NTCA, to Marlene H. Dortch, Secretary, FCC, WC Docket 10-90, CC Docket 01-92, at 6 (filed Oct. 19, 2011).

¹⁰ *Connect America Fund*, WC Docket No. 10-90, et al., Report and Order and Further Notice of Proposed Rulemaking, FCC 11-161 (rel. Nov. 18, 2011) (“USF/ICC Transformation Order and FNPRM”), ¶ 998, *et seq.*

¹¹ Foisting such costs onto RLECs and their small rural customer bases would be particularly ironic shortly after the Commission expressed concern about the affordability of rural voice service rates in the context of the ill-advised “rate floor” policy. *Connect America Fund*, WC Docket No. 10-90, Report and Order, FCC 19-32 (rel. Apr. 15, 2019).

It must also be stated that the issue at hand is not one of “TDM vs IP” – NTCA’s members are in many respects leaders in the IP transition, and the concerns with respect to transport costs are entirely “technology-agnostic.” The Commission should be as well, and should recognize that the transport responsibilities discussed herein do not simply “go away” as voice traffic migrates to IP. The fact remains that these transport costs will be borne by someone. NTCA only asks that the costs of NNP functionality be borne by the operators seeking to offer such functionality, and that technology not be cited as an excuse to justify ignoring these costs or to put them on the backs of smaller rural carriers and their customers.

- C. The Commission’s Office of Economics and Analytics should conduct a comprehensive review of the *NANC NNP Report* that includes the costs identified above. That review should also consider that “commercial agreements” avoid these costs, and ultimately ensure that those benefiting from NNP assume responsibility for the costs of doing so.**

As the Commission moves forward with its consideration of NNP, a comprehensive cost/benefit analysis, via its Office of Economics and Analytics, of the options for enabling NNP functionality as set forth in the *NANC NNP Report* is critical. In a NLRN-enabled NNP environment, the “porting-in” carrier is one that must be properly viewed as having realized a benefit from NNP, capturing a new subscriber via its ability to market and provide such functionality as a service. The “porting out” carrier is one that has “lost” that subscriber. Yet, absent Commission attention to the full range of costs and how they are apportioned among the parties involved, hundreds of thousands of rural consumers and the hundreds of small rural carriers that serve them – not involved in the transaction in any way – could be significantly and negatively affected by assuming the costs of enabling the “porting-in” carrier to offer this new service. Specifically, as noted in the discussion of the call flow scenario above, RLEC subscribers (none of which are customers of the “porting-in” or “porting out” carrier) would be

required to assume long-distance charges for placing calls to numbers ported out to distant locations. This of course does not include the additional categories of costs identified above that will be absorbed by providers or passed on to end-users directly.

As it proceeds with this cost-benefit analysis, the Commission should do so with the understanding that commercial agreements can *today* enable any provider to offer NNP as a service without any additional rule changes. Thus, the impetus is not on the Commission to move quickly to enable NNP as a service offering for consumers without regard to whom will bear the costs – rather the Commission can allow commercial agreements to continue to be the vehicle for carriers’ offering of said service and do so in a manner that protects consumers via the proper apportionment of costs.

When considering commercial agreements as a method of properly apportioning costs among beneficiaries and those entities incurring the costs, it is helpful to begin by returning to the call flow scenario discussed above. With respect to that scenario, “Wireless Carrier 2” (aka the “porting-in” provider) could enter into a commercial agreement with a third-party capable of operating as a “third party network.”¹² The “third party network” would, in this instance, be responsible for the transport of calls from the “network edge” of ABC RLEC to the called-party customer of Wireless Carrier 2. This places the full logistical and financial responsibility for implementing NNP functionality on the carrier interested in marketing and offering that service – rather than foisting costs on carriers that have no relationship or privity with either the carrier providing NNP porting capability or that carrier’s customer. Moreover, in stark contrast to the

¹² *Nationwide Number Portability*, WC Docket No. 17-244, *Numbering Policies for Modern Communications*, WC Docket No. 13-97, Notice of Proposed Rulemaking and Notice of Inquiry, FCC 17-133 (rel. Oct. 26, 2017), ¶¶ 56-57.

other approaches described in various NANC reports on the subject (including NLRNs as discussed in the *NANC Report*), the use of commercial agreements obviates the need for changes to existing databases and routing practices, would minimize confusion on the part of the customers on either end of the call, and avert the placement of any additional burdens on other carriers involved.

In contrast to the identified NNP “solutions” presented in the *NANC NNP Report*, with so many obvious and thorny complications, the alternative of “commercial agreements” offers the best and most immediate option. It must be said that commercial agreements are not a perfect solution; indeed, the Commission is unlikely to find one even as certain segments of the industry support the agency continuing to “cast about” for such a perfect answer. With respect to commercial agreements, some customer confusion may arise yet certain steps can be taken to mitigate its impact. For example, in a scenario where a subscriber from California moves to rural South Dakota and takes her number, in a NNP environment, other “local” consumers in South Dakota may ask why, when calling someone they understand is actually a neighbor (albeit with a California number), that call is treated as long distance in nature. Of course, that is of less concern than the customer in the rural South Dakota town dialing what they think is a local call and having to pay toll charges as a surprise because the dialed number was ported away to California. Ultimately, commercial agreements can help solve the latter issue by ensuring that the porting-in provider assumes all of the financial and logistical responsibilities that come with offering NNP as a functionality. The Commission can further minimize confusion by requiring *all porting-in carriers* to disclose to consumers (residential and business) any ramifications of NNP service such as a possible assumption of toll charges by the end-user going forward. In addition, a porting-in carrier that lacks interconnection agreements with local providers and that

as a result must assess its new customer toll or other charges to complete local calls should be required to disclose those charges to potential customers. While less than perfect commercial agreements are a straight-forward, immediately available, and market-based versus Commission driven option available for providers interested in doing so to adopt NNP as a service.

In creating the Commission’s Office of Economics and Analytics, Chairman Ajit Pai wisely stated that, the “communications sector is a major part of America’s economy, and our rules can substantially affect incentives of companies and consumers. This makes it essential that we systematically incorporate sound economics in our work.”¹³ With respect to the issues presented by potential Commission policies in regard to NNP functionality, it is essential that “sound economics” underpin the analysis particularly in terms of the effect on consumers all across the nation. Just as the Commission should look to the benefits of rule changes that could further enable NNP functionality, it must also consider the costs – all of them and not just some – to ensure that any actions the agency takes do not allow providers to capture benefits while shifting costs to other providers and their subscribers. Indeed, a referral to the Office of Economics and Analytics was an important recommendation made by the initial NANC NNP Working Group Report issued in 2018 that smartly recognized that – outside of commercial agreements – the options on the table for carriers offering NNP would bestow benefits on some providers while shifting costs to other.¹⁴ The Commission should follow through and use the expert capabilities at its disposal to ensure that all costs of implementation of NNP via a

¹³ Press Release, *FCC Opens Office of Economics and Analytics*, Federal Communications Commission (December 11, 2018).

¹⁴ Report on Findings Related to ATIS Models on Nationwide Number Portability, Federal Communications Commission North American Numbering Council Nationwide Number Portability Issues Working Group (June 2018), p. 2.

particular solution are taken into account, and that those costs are assigned as efficiently as possible to those parties realizing the greatest benefit from NNP.

III. CONCLUSION

For the reasons set forth above, the Commission's Office of Economics and Analytics should conduct a comprehensive review of the *NANC NNP Report* that includes the costs identified herein. That review should also consider that "commercial agreements" avoid these costs and ensure that those benefiting from NNP assume responsibility for the costs of doing so.

Respectfully submitted,



By: /s/ Michael R. Romano
Michael R. Romano
Senior Vice President –
Industry Affairs & Business Development
mromano@ntca.org

By: /s/ Brian J. Ford
Brian J. Ford
Director of Industry Affairs
bford@ntca.org

4121 Wilson Boulevard, Suite 1000
Arlington, VA 22203
(703) 351-2000